Table 22.3 Some Shear Deflection Criteria for Simply Supported Beams

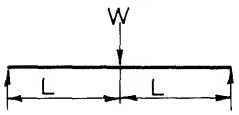
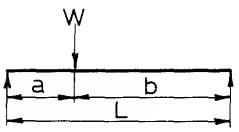
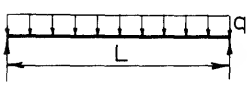
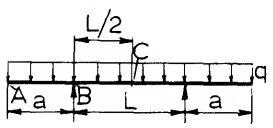
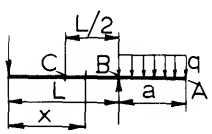
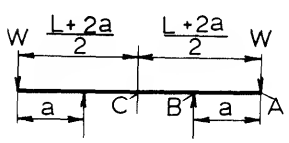
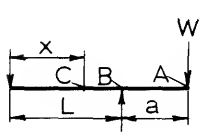
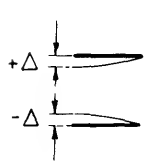
	$Y_s = \dfrac{3WL}{10GBH}$	$\dfrac{Y_s}{Y_b} = 3\left(\dfrac{H}{L}\right)^2$
	$Y_s = \dfrac{6Wab}{5GBHL}$	$\dfrac{Y_s}{Y_b} = \dfrac{3H^2}{4ab}$
	$Y_s = \dfrac{3qL^2}{20GBH}$	$\dfrac{Y_s}{Y_b} = \dfrac{12}{5}\left(\dfrac{H}{L}\right)^2$

Table 22.4 Maximum Moments and Deflections for Simply Supported Beams with Overhangs

	$M_B = \dfrac{qa^2}{2}$ $M_C = \dfrac{q(L^2 - 4a^2)}{8}$	$\Delta_A = \dfrac{qa(3a^3 + 6a^2L - L^3)}{24EI}$ $\Delta_C = \dfrac{qL^2(5L^2 - 24a^2)}{384EI}$
	$M_B = \dfrac{qa^2}{2}$	$\Delta_A = \dfrac{qa^2L(4L + 3a)}{24EI}$ $\Delta_C = -\dfrac{qaL^3}{31EI}$ at $x = 0.58L$
	$M_B = Wa$	$\Delta_A = \dfrac{Wa^2(3L + 2a)}{6EI}$ $\Delta_C = -\dfrac{WaL^2}{8EI}$
	$M_B = Wa$	$\Delta_A = \dfrac{Wa^2(L + a)}{3EI}$ $\Delta_C = -\dfrac{0.064WaL^2}{EI}$ at $x = 0.58L$
	Positive deflection Negative deflection	